May

RAW SEQUENCE LISTING PATENT APPLICATION US/08/765,012A

DATE: 09/15/98 TIME: 15:22:05

ENTERED

INPUT SET: S28654, raw

This Raw Listing contains the General Information Section and up to the first 5 pages.

```
1
                                      SEQUENCE LISTING
 2
            General Information:
    (1)
    (i) APPLICANT: Wild, Hanno; Hanko, Rudolf; Dorschug, Michael;
    Horlein, Hans-Dietrich; Beunink, Jurgen;
    Apeler, Heiner; Wehlmann, Hermann; and Sebald,
    Walter
    (ii) TITLE OF INVENTION: HIL-4 MUTANT PROTEINS USED AS
    ANTAGONISTS OR PARTIAL AGONISTS OF
    HUMAN INTERLEUKIN 4
10
    (iii) NUMBER OF SEQUENCES: 20
11
12
    (iv) CORRESPONDENCE ADDRESS:
13
    (A) ADDRESSEE: Sprung Kramer Schaefer & Briscoe
    (B) STREET: 660 White Plains Road
14
15
    (C) CITY: Tarrytown
16
         STATE: New York
    (D)
         COUNTRY: USA
17
    (E)
18
    (F) ZIP: 10591-5144
         COMPUTER READABLE FORM:
19
    (V)
20
    (A) MEDIUM TYPE: Diskette, 3.50 inch, 1.4 Mb storage
         COMPUTER: Apple Macintosh
21
    (B)
22
    (C)
         OPERATING SYSTEM: System 7.5
23
    (D) SOFTWARE: WordPerfect 3.5
24
    (vi) CURRENT APPLICATION DATA:
    (A) APPLICATION NUMBER: 08/765,012
25
    (B) FILING DATE: 19-DEC-1996
26
27
    (C) CLASSIFICATION:
    (vii) PRIOR APPLICATION DATA:
28
29
    (A) APPLICATION NUMBER: PCT/EP95/02358
30
    (B)
         FILING DATE: 19-JUN-1995
    (vii) PRIOR APPLICATION DATA:
31
32
    (A) APPLICATION NUMBER: DE 44 23 131
33
    (B) FILING DATE: 01-JUL-1994
34
    (viii) ATTORNEY/AGENT INFORMATION:
35
    (A) NAME: Kurt G. Briscoe
36
    (B) REGISTRATION NUMBER: 33,141
37
    (C) REFERENCE/DOCKET NUMBER: BAYER 9776-KGB
38
    (ix)
          TELECOMMUNICATION INFORMATION:
    (A) TELEPHONE: (914) 332-1700
39
    (B) TELEFAX: (914) 332-1844
40
41
42
43
    (2) INFORMATION FOR SEQ ID NO: 1:
    (i) SEQUENCE CHARACTERISTICS:
44
    (A) LENGTH: 16 base pairs
45
    (B) TYPE: nucleic acid
46
```

RAW SEQUENCE LISTING .PATENT APPLICATION US/08/765,012A

DATE: 09/15/98 TIME: 15:22:06

```
(C) STRANDEDNESS: single
47
    (D) TOPOLOGY: linear
48
    (ii) MOLECULE TYPE: cDNA
49
50
    (iii) HYPOTHETICAL: no
51
    (iv) ANTI-SENSE: no
    (vi) ORIGINAL SOURCE:
52
53
            (C) INDIVIDUAL ISOLATE: synthetic
54
     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1:
55
56
                                                               16
    CATGCACAAG TGCGAT
57
58
59
    (2) INFORMATION FOR SEQ ID NO: 2:
    (i) SEQUENCE CHARACTERISTICS:
60
    (A) LENGTH: 12 base pairs
61
    (B) TYPE: nucleic acid
62
63
    (C) STRANDEDNESS: single
    (D) TOPOLOGY: linear
64
65
    (ii) MOLECULE TYPE: cDNA
66
    (iii) HYPOTHETICAL: no
67
    (iv) ANTI-SENSE: no
68
    (vi) ORIGINAL SOURCE:
69
            (C) INDIVIDUAL ISOLATE: synthetic
    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2:
70
71
                                                           12
72
    ATCGCACTTG TG
73
74
    (2) INFORMATION FOR SEQ ID NO: 3:
    (i) SEQUENCE CHARACTERISTICS:
75
    (A) LENGTH: 21 base pairs
76
    (B) TYPE: nucleic acid
77
    (C) STRANDEDNESS: single
78
79
    (D) TOPOLOGY: linear
    (ii) MOLECULE TYPE: cDNA
80
81
    (iii) HYPOTHETICAL: no
82
    (iv) ANTI-SENSE: no
  (vi) ORIGINAL SOURCE:
            (C) INDIVIDUAL ISOLATE: synthetic
84
    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3:
85
86
                                                               21
87
    GCCTCCAAGG ACACAACTGA G
88
    (2) INFORMATION FOR SEQ ID NO: 4:
89
    (i) SEQUENCE CHARACTERISTICS:
90
    (A) LENGTH: 24 base pairs
91
    (B) TYPE: nucleic acid
92
    (C) STRANDEDNESS: single
93
    (D) TOPOLOGY: linear
94
    (ii) MOLECULE TYPE: cDNA
95
96
    (iii) HYPOTHETICAL: no
97
    (iv) ANTI-SENSE: no
98
    (vi) ORIGINAL SOURCE:
            (C) INDIVIDUAL ISOLATE: synthetic
99
```

RAW SEQUENCE LISTING PATENT APPLICATION US/08/765,012A

DATE: 09/15/98 TIME: 15:22:07

```
(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 4:
100
101
102
     GTGAAGGAAG CCGACCAGAG TACG
                                                             24
103
     (2) INFORMATION FOR SEQ ID NO: 5:
104
     (i) SEQUENCE CHARACTERISTICS:
105
     (A) LENGTH: 36 base pairs
106
107
     (B) TYPE: nucleic acid
     (C) STRANDEDNESS: single
108
     (D) TOPOLOGY: linear
109
110
     (ii) MOLECULE TYPE: cDNA
111
     (iii) HYPOTHETICAL: no
112
     (iv) ANTI-SENSE: no
     (vi) ORIGINAL SOURCE:
113
114
             (C) INDIVIDUAL ISOLATE: synthetic
     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 5:
115
116
117
                                                            36
     CTGGAGACTG CCATGGCCCA CAAGTGCGAT ATCACC
118
119
120
     (2) INFORMATION FOR SEQ ID NO: 6:
     (i) SEQUENCE CHARACTERISTICS:
121
     (A) LENGTH: 131 amino acids
122
     (B) TYPE: amino acid
123
124
     (D) TOPOLOGY: linear
125
     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 6:
126
127
128
     Met Ala His Lys Cys Asp Ile Thr Leu Gln Glu
129
                1
                                 5
130
     Ile Ile Lys Thr Leu Asn Ser Leu Thr Glu
131
132
      10
                           15
133
134
     Gln Lys Thr Leu Cys Thr Glu Leu Thr Val
135
      20
                           25
136
     Thr Asp Ile Phe Ala Ala Ser Lys Asn Thr
137
138
       30
139
     Thr Glu Asn Glu Thr Phe Cys Arg Ala Ala
140
141
      40
                           45
142
143
     Thr Val Leu Arg Gln Phe Tyr Ser His His
144
      50
145
146
     Glu Lys Asp Thr Arg Cys Leu Gly Ala Thr
147
      60
                           65
148
149
     Ala Gln Gln Phe His Arg His Lys Gln Leu
150
      70
151
152
     Ile Arg Phe Leu Lys Arg Leu Asp Arg Asn
```

RAW SEQUENCE LISTING PATENT APPLICATION US/08/765,012A

DATE: 09/15/98 TIME: 15:22:08

```
85
  153
         80
  154
  155
        Leu Trp Gly Leu Ala Gly Leu Asn Ser Cys
  156
         90
  157
       Pro Val Lys Glu Ala Asn Gln Ser Thr Leu
  158
  159
        100
                             105
  160
        Glu Asn Phe Leu Glu Arg Leu Lys Thr Ile
  161
  162
        110
  163
       Met Arg Glu Lys Asp Ser Lys Cys Ser Ser
  164
  165
        120
                             125
  166
  167
  168
        (2) INFORMATION FOR SEQ ID NO: 7:
        (i) SEQUENCE CHARACTERISTICS:
  169
  170
        (A) LENGTH: 131 amino acids
        (B) TYPE: amino acid
  171
  172
        (D) TOPOLOGY: linear
  173
        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 7:
174
175
  176
       Met Ala His Lys Cys Asp Ile Thr Leu Gln Glu
  177
  178
        Ile Ile Lys Thr Leu Asn Ser Leu Thr Glu
  179
  180
         10
                              15
  181
  182
       Gln Lys Thr Leu Cys Thr Glu Leu Thr Val
  183
         20
                              25
  184
       Thr Asp Ile Phe Ala Ala Ser Lys Asn Thr
  185
  186
         30
                              35
  187
       Thr Glu Asn Glu Thr Phe Cys Arg Ala Ala
  188
  189
  190
       Thr Val Leu Arg Gln Phe Tyr Ser His His
  191
  192
         50
                              55
  193
       Glu Lys Asp Thr Arg Cys Leu Gly Ala Thr
  194
  195
         60
                              65
  196
       Ala Gln Gln Phe His Arg His Lys Gln Leu
  197
  198
         70
                              75
  199
  200
        Ile Arg Phe Leu Lys Arg Leu Asp Arg Asn
  201
         80
                              85
  202
  203
       Leu Trp Gly Leu Ala Gly Leu Asn Ser Cys
  204
         90
                              95
  205
```

RAW SEQUENCE LISTING . PATENT APPLICATION US/08/765,012A

DATE: 09/15/98 TIME: 15:22:08

206 207	Pro	Val	Lys	Glu	Ala	Asn 105	Gln	Ser	Thr	Leu
208	100					103				
209		Asn	Phe	Leu	Glu	_	Leu	Lys	Thr	Ile
210	110					115				
211	Wat	3 an	<i>α</i> 1	T	2 ~~	C 0 m	T	7	C0 T	Com
212 213	120	_	Glu	гÀг	Asp	125	rÀa	cys	ser	ser
213	120					123				
215										
216	(2)	TNF	ORMAT	TON	FOR	SEO	TD 1	10: 8	3 :	
217	• •		JENCE			_			•	
218	•		TH:		_					
219	• •		3: an							
220	•		DLOG							
221	• •						ON:	SEQ	ID 1	10: 8:
222	,		_					_		
223										
224	Met	Ala	His	Lys	Cys	Asp	Ile	Thr	Leu	Gln Glu
225			1				5			
226										
227	Ile	Ile	Lys	Thr	Leu	Asn	Ser	Leu	Thr	Glu
228	10					15				
229										
230		Lys	Thr	Leu	Cys		Glu	Leu	Thr	Val
231	20					25				
232	1	_		_,				_	_	•
233		Asp	Ile	Phe	Ala		Ser	Lys	Asn	Thr
234	30					35				
235	ml	a 1	3	~1	ml	Dh.a	G	3	11.	37.
236		GIU	Asn	GIU	Thr		cys	Arg	АТа	АТа
237 238	40					45				
239	Thr	Val	Leu	Ara	Gl n	Dha	ጥላታዮ	Sar	Hie	Hic
240	50	Val	пеа	n y	0111	55	- y -	Der	1115	1115
241	30									
242	Glu	Lvs	Asp	Thr	Ara	Cvs	Leu	Glv	Ala	Thr
243	60	4	. •		,	65		-		
244										
245	Ala	Gln	Gln	Phe	His	Arg	His	Lys	Gln	Leu
246	70					75		_		
247										
248	Ile	Arg	Phe	Leu	Lys	Arg	Leu	Asp	Arg	Asn
249	80					85				
250			_		_	_				
251		Trp	Gly	Leu	Ala		Leu	Asn	Ser	Cys
252	90					95				
253	D	U-7	T	~ 1	37 -	3	~1	C	ml	Τ α
254		val	Lys	GTU	ATA		GIN	ser	THE	ьeu
255 256	100					105				
256 257	Glii	Acn	Phe	11ه.۲	Glu	Δra	Τ.Δ11	T.vc	ሞh r	Tle
258	110			u		115	~~u	~, 5	****	
200										

SEQUENCE VERIFICATION REPORT .PATENT APPLICATION US/08/765,012A

DATE: 09/15/98 TIME: 15:22:09

INPUT SET: S28654.raw

Line Error

Original Text